2. (Previously Amended) The water sorptive product of claim 1, wherein the superabsorbent polymer has a degree of neutralization less than about 80 mol %.

3. (Currently Amended) The water sorptive product of claim 1, wherein the superabsorbent polymer ~~is obtained from partially *in situ* neutralized water swellable polymer~~ comprising the reaction product of:

(a) an olefinically-unsaturated acid selected from the group consisting of carboxylic acid, sulfonic acid, and mixtures thereof;

(b) a compatible co-monomer for the acid of (a); and

(c) a cross-linking agent;

said reaction product (i) being water insoluble and (ii) having carboxyl groups present therein, which carboxyl groups, when neutralized to their salt form, maintain the polymer as water insoluble and convert the polymer component into a superabsorbent polymer component.

4. (Previously Amended) The water soprtive product of claim 1, wherein the superabsorbent polymer is surface cross-linked.

5. (Previously Amended) The water sorptive product of claim 1, wherein the product has a centrifuge retention capacity property above 10 grams/gram.

6. (Previously Amended) The water sorptive product of claim 1, wherein the product has an absorbency under load property above about 13 grams/gram at about 20 grams/cm^2 (about 0.3 psi).

Remarks

The Advisory Action mailed June 13, 2003 has been carefully considered.

The present invention is directed towards a wet-laid web of superabsorbent polymer (SAP) and fiber wherein the superabsorbent polymer is partially neutralized by neutralizing the polymer after mixing the polymer with the fiber during the wet-laid process of making a web, wherein the degree of neutralization of the SAP is partial, preferably less than about 80 mol %. As discussed on page 4, lines 3-17, of the application, a wet-laid web of a SAP and fiber may be formed by: (1) mixing a SAP with fiber; or (2) mixing a polymer, which is not a SAP but is capable of becoming one upon neutralization, with fiber and then *in situ* neutralizing the polymer to convert it into a SAP.

As set forth on page 1, lines 9 to 13 of the application, *in situ* neutralizing means the neutralization of polymer to make it into a superabsorbent polymer is conducted after mixing the polymer with fiber during the wet-laid process of making a web, as opposed to a wet-laid process of making a web where already neutralized superabsorbent polymer is mixed with fiber. The *in situ* neutralization is more cost effective for a large scale factory production because it uses less water then the conventional wet-laid process of mixing SAP with fiber. As further discussed in the application for the present invention, webs of SAP and cellulosic fiber made by partial *in situ* neutralization, such as less than 80 mol %, exhibit excellent centrifuge retention capacity property, as compared to prior art webs made by total *in situ* neutralization, such as 100 mol % or more.

In the office action of June 13, 2003, the Examiner states that he was not persuaded by the applicant's response of May 29, 2003. It is the Examiner's position the

product of prior art reads on that which is claimed even though the latter is made by a process which is different from the one used for preparing the former one. Applicants have not established that their product is patentability distinguishable from that of prior art. With all due respect, the Examiner has not correctly interpreted the claim of the present invention.

In the office action of March 13, 2003, the Examiner states on page 2 that he was not persuaded by the applicant's response of July 22, 2002. It is the Examiner's position the product of prior art reads on that which is claimed even though the latter is made by a process which is different from the one used for preparing the former one. Applicants have not established that their product is patentability distinguishable from that of prior art. With all due respect, the Examiner has not correctly interpreted the claim of the present invention.

To evaluate whether is prior art and reads on the claims requires one to begin with claim interpretation. In Key Pharmaceuticals Inc. v. Hercon Laboratories Corp (1998) [48 USPQ2d 1911 Fed Cir 1998] the Federal Circuit noted, "not unlike a determination of infringement, a determination of anticipation, as well as obviousness, involves two steps. First is construing the claim, a question of law for the court, followed by, in the case of anticipation of obviousness, a comparison of the construed claim to the prior art. According to the Federal Circuit, interpretation of a claim requires one to read the claims using the ordinary meaning of the words in the claim and must include all limitations contained in the claim.

The courts have frequently applied the rule – "That which infringes if later anticipates if earlier."

Hence one must apply the 2-part legal test for infringement when evaluating claims for anticipation:

1. The claim must be properly construed to determine its scope and meaning.

2. The claim as properly construed must be compared to the prior art.

Applying this principle to the present claims, one must include the limitation the water sorptive product is a "partially *in situ* wet-laid web of SAP and fiber". In view of this, claim 1 properly construed to determine its scope and meaning would be a water sorptive product wherein the wherein the superabsorbent polymer is partially neutralized by neutralizing the polymer after mixing the polymer with the fiber during the wet-laid process of making a web wherein the product has a superior CRC to product wherein preneutralized SAP is used.

Sun et al. is directed towards a particulate material composition having anti-caking properties that is produced by mixing SAP particles with an inorganic powder such as clay. Column 4, lines 47-48 ("A mixture of SAP particles and inorganic powder is referred to as a 'particulate material composition'.").

The prior art cited by the Examiner includes Sun et al (US6,124,391) and Dahmen et al (US5,409,771). Sun et al. does not teach or suggest that pre-SAP acid groups are mixed with an additional substance and then partially neutralized after mixed with fiber in the wet laid process, as taught in the application for the present invention. To the contrary, Sun et al. teaches that the SAP is formed (the acid groups are neutralized) and then mixed with inorganic powder. Column 5, lines 3-5 and 11-12 ("[T]he SAP may be obtained by polymerizing at least about 25%, more preferably about 55 to about 99.9% by weight of monomers having olefinically-unsaturated carboxylic and/or sulfonic acid

groups. …The acid groups are typically neutralized to at least about 25 mol %."); Column 7, lines 23-24 ("The inorganic powder is preferably mixed with the SAP particles in an amount sufficient to achieve anti-caking characteristics…"), lines 31-33 ("The inorganic powder may be mixed with the particles of SAP in a substantially dry state, or with the addition of a liquid such as water…"), and lines 38-39 ("The inorganic powder and the particles of SAP can be intermixed in any suitable manner.").

Similar to Sun et al., Dahmen et al. does not teach or suggest partial neutralization after the SAP is in the wet laid form. Rather, Dahmen et al. discloses a powdery water-insoluble crosslinked resin composed of unsaturated polymerizable monomer containing acid groups that are neutralized and coated with an alkylene carbonate surface X-linking agent, and then mixed with paper or fluff pulp or synthetic fibers. Column 5, lines 28-33 ("The polymers coated according to the present invention are used in absorbent articles for various kinds of application, e.g., by mixing with paper or fluff pulp or synthetic fibers…"). Therefore, Dahmen et al. does not overcome the deficiencies of Sun et al.

Independent claim 1 of the present application clearly recites a water sorptive product where in the polymer is partially neutralized after mixing the polymer with the fiber during the wet-laid process of making a web. Therefore, claim 1 is patentable over Sun et al. in view of Dahmen et al. Accordingly, dependent claims 2-6 are patentable at least for the reasons with respect to independent claim 1.

This case is in condition for allowance and such action is respectfully requested. If any issues remain unresolved, applicant would welcome the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,

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Date: July 14, 2003

File No. 5003073-005US2

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